## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8



1595 Wynkoop Street DENVER, CO 80202-1129 Phone 800-227-8917 http://www.epa.gov/region08

Ref: 8RA

## RECOMMENDATION CONCERNING DETERMINATION AND FINDINGS OF PUBLIC HEALTH EMERGENCY

SUBJECT: Public Health Emergency at the Libby Asbestos Site - Libby, Lincoln County,

Montana

FROM: Carol Rushin

Acting Regional Administrator

Mathy V. Stanislaus

Assistant Administrator

Office of Solid Waste and Emergency Response

TO: Lisa Jackson

Administrator

Re: Site ID#: BC

Professional staff have reviewed the Administrative Record compiled for the Determination and Findings of Public Health Emergency at the Libby Asbestos National Priorities List Site and have informed us that the Administrative Record supports the determination and findings. Therefore, based on the Administrative Record and on the advice and recommendations we have received, we recommend that you determine that a Public Health Emergency exists under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, at the Libby Asbestos National Priorities List Site.



## CERTIFICATION OF INDEX OF DOCUMENTS IN THE ADMINISTRATIVE RECORD FOR THE DETERMINATION AND FINDINGS OF PUBLIC HEALTH EMERGENCY FOR THE LIBBY ASBESTOS SITE IN LINCOLN COUNTY, MONTANA

This certification identifies documents considered or relied on for the Determination and Findings of Public Health Emergency under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, for the Libby Asbestos Site in Montana, Site/Spill ID # 08-BC. The documents are in the Administrative Record for the Site. The attached index lists the documents considered or relied on for the Public Health Emergency Determination and Findings.

By the United States Environmental Protection Agency:

In witness whereof, I have subscribed my name this \_\_\_\_ day of June, 2009 in Washington, D.C.

Mathy V. Stanislaus

Assistant Administrator

Office of Solid Waste and Emergency Response

In witness whereof, I have subscribed my name this **Moth** day of June, 2009 in Denver, Colorado.

Carol Rushin

Acting Regional Administrator

EPA Region 8

## INDEX OF DOCUMENTS IN THE ADMINISTRATIVE RECORD FOR THE DETRMINATION AND FINDINGS OF PUBLIC HEALTH EMERGENCY AT THE LIBBY ASBESTOS SITE

Agency for Toxic Substances and Disease Registry (2003) Public Health Assessment, Libby Asbestos NPL Site. OU4: Screening Plant, Export Plant, Town of Libby, and Affected Libby Valley Residential and Commercial Properties, Lincoln County, Montana. EPA Facility ID: MT0009083840, U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, Division of Health Assessment and Consultation Superfund Site Assessment Branch

Amandus HE and Wheeler R (1987) The morbidity and mortality of vermiculite miners and millers exposed to tremolite-actinolite: Part II. Mortality. *American Journal of Industrial Medicine* 11:15-26.

Dixon GH, Doria J, Freed JR, Wood P, May I, Chambers T, Desai P (1985) Exposure Assessment for Asbestos-Contaminated Vermiculite. EPA-560/5-85-013. Washington, DC, USEPA Office of Pesticides and Toxic Substances.

Flynn JJ, Kardos S, Yan L (2004) Overstating the consequences of radiographic abnormalities. (Correspondence) *Environmental Health Perspectives* 112:A84.

Hart JF, Ward TJ, Spear TM, Crispen K, Zolnikov TR (2007) Evaluation of asbestos exposure during firewood-harvesting simulations in Libby, MT, USA – preliminary data. *Annals of Occupational Hygiene* 51:717-23.

Horton K, Kapil V, Larson T, Muravov O, Melnikova N (2006) A review of the federal government's health activities in response to asbestos-contaminated ore found in Libby, Montana *Inhalation Toxicology* 18:925-940.

Lincoln County Health Profile, September 2002, see <a href="http://www.dphhs.mt.gov/PHSD/health-profiles/pdf/lincoln.pdf">http://www.dphhs.mt.gov/PHSD/health-profiles/pdf/lincoln.pdf</a>, as of June 10, 2009.

McDonald JC, Harris J, Armstrong B (2004) Mortality in a cohort of vermiculite miners exposed to fibrous amphibole in Libby, Montana. *Occupational and Environmental Medicine* 61:363-366.

McDonald JC, McDonald AD, Armstrong B, Sebastien B (1986) Cohort study of mortality of vermiculite miners exposed to tremolite. *British Journal of Industrial Medicine* 43:436-444.

McGrath, M., Montana Attorney General, (August 13, 2001) Letter and Memorandum.

Montana Primary Care Health Professional Shortage Area List, dated November 2001, see <a href="http://www.dphhs.mt.gov/PHSD/Primary-Care/pdf/hpsa">http://www.dphhs.mt.gov/PHSD/Primary-Care/pdf/hpsa</a> lst.pdf, as of June 10, 2009.

Noonan CW, Pfau JC, Larson TC, Spence MR (2006) Nested cased-control study of autoimmune disease in an asbestos-exposed population. *Environmental Health Perspectives* 114:1243-1247.

Peipins LA, Lewin M, Campolucci S, Lybarger JA, Miller A, Middleton D, Weis C, Spence M, Black B, Kapil V. (2003) Radiographic abnormalities and exposure to asbestos-contaminated vermiculite in the community of Libby, MT, USA. *Environmental Health Perspectives* 111:1753-1759.

Peipins LA, Lewin M, Campolucci S, Lybarger JA, Miller A, Middleton D, Weis C, Spence M, Black B, Kapil V (2004) Radiographic abnormalities: response from Peipins et al. (Correspondence) *Environmental Health Perspectives* 112:A83.

Peipins LA, Lewin M, Campolucci S, Lybarger JA, Miller A, Middleton D, Weis C, Spence M, Black B, Kapil V (2004) Overstating the consequences: Peipins et al.'s response. (Correspondence) *Environmental Health Perspectives* 112:A84 - A85.

Pfau JC, Sentissi JJ, Weller G, Putnam EA (2005) Assessment of autoimmune responses associated with asbestos exposure in Libby, Montana, USA. *Environmental Health Perspectives* 113:25-30.

Price B (2004) Radiographic Abnormalities and Asbestos Exposure: Libby Montana. (Correspondence) *Environmental Health Perspectives* 112:A82-A83.

Price B (2008) Exposure to airborne amphibole structures and health risks: Libby, Montana. *Regulatory Toxicology and Pharmacology* 52:S97–S109.

Rohs AM, Lockey JE, Dunning KK, Shukla R, Fan H, Hilbert T, Borton E, Wiot J, Meyer C, Shipley RT, LeMasters GK, Kapil V (2008) Low-level fiber-induced radiographic changes caused by Libby vermiculite: a 25-year follow-up study. *American Journal of Respiratory and Critical Care Medicine* 177:630-637.

Sullivan PA (2007) Vermiculite, respiratory disease, and asbestos exposure in Libby, Montana: update of a cohort mortality study. *Environmental Health Perspectives* 115:579-585.

U.S. v. W.R. Grace, 504 F.3d 745, C.A.9 (Mont.), 2007.

US Department of Health and Human Services, Health Resources and Services Administration. Health Professional Shortage Areas by State and County, see <a href="http://hpsafind.hrsa.gov/HPSASearch.aspx">http://hpsafind.hrsa.gov/HPSASearch.aspx</a>, as of June 10, 2009.

USEPA (2007) Conceptual Site Model for inhalation exposures to asbestos. Libby Superfund Site – Operable Unit 4 (main residential, commercial, and public areas of Libby). Version 16.

USEPA Area Designations for 2006 24-Hour Fine Particle (PM 2.5) Standards http://www.epa.gov/pmdesignations/2006standards/regs.htm#3, as of June 10, 2009.

Ward TJ, Hart JF, Spear TM, Meyer BJ, Webber JS (2009) Fate of Libby amphibole fibers when burning contaminated firewood. *Environmental Science and Technology* 43:2878-83.

Ward TJ, Spear T, Hart J, Noonan C, Holian A, Getman M, Webber JS (2006) Trees as reservoirs to amphibole fibers in Libby, Montana. *Science of the Total Environment* 367:460-5.

Webber JS, Getman M, Ward TJ (2006) Evidence and reconstruction of airborne asbestos from unconventional environmental samples. *Inhalation Toxicology* 18:969-73.

Whitehouse AC (2004) Asbestos-related pleural disease due to tremolite associated with progressive loss of lung function: serial observations in 123 miners family members, and residents of Libby, Montana. *American Journal of Industrial Medicine* 46:219-225.

Whitehouse AC, Black CB, Heppe MS, Ruckdeschel J, Levin SM (2008) Environmental exposure to Libby asbestos and mesotheliomas. *American Journal of Industrial Medicine* 51:877-880.